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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-----------------|----------------------|---------------------|------------------|--|
| 09/686,323 | 10/09/2000 | Bin Zhao | 97RSS433DIV | 6870 | |
| 25700 | 7590 11/30/2004 | | EXAMINER | | |
| | & FARJAMI LLP | PERALTA, GINETTE | | | |
| 26522 LA ALAMEDA AVENUE, SUITE 360 MISSION VIEJO, CA 92691 | | | ART UNIT | PAPER NUMBER | |
| | , | | 2814 | | |

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | |
|--|--|---|--------------------------------|
| Advisory Action | 09/686,323 | ZHAO, BIN | |
| • | Examiner | Art Unit | 1 |
| | Ginette Peralta | 2814 | A P |
| The MAILING DATE of this communication appe | ars on the cover sheet with the c | orrespondence add | ress |
| THE REPLY FILED 28 October 2004 FAILS TO PLACE. Therefore, further action by the applicant is required to aviginal rejection under 37 CFR 1.113 may only be either: (1) condition for allowance; (2) a timely filed Notice of Appeal Examination (RCE) in compliance with 37 CFR 1.114. | oid abandonment of this applica a timely filed amendment whicl | ation. A proper reply h places the applica | y to a tion in |
| PERIOD FOR RE | PLY [check either a) or b)] | | |
| a) The period for reply expires 3 months from the mailing date b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire is ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The fee have been filed is the date for purposes of determining the period of | Advisory Action, or (2) the date set forth ater than SIX MONTHS from the mailing FILED WITHIN TWO MONTHS OF THE date on which the petition under 37 CF | g date of the final rejection. HE FINAL REJECTION. R 1.136(a) and the appro | on. See MPEP opriate extension |
| fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of t (2) as set forth in (b) above, if checked. Any reply received by the Offic timely filed, may reduce any earned patent term adjustment. See 37 C | the shortened statutory period for reply be later than three months after the main (FR 1.704(b)). | originally set in the final ling date of the final reje | Office action; or |
| 1. A Notice of Appeal was filed on Appellant's 37 CFR 1.192(a), or any extension thereof (37 CFF | R 1.191(d)), to avoid dismissal o | | |
| 2. The proposed amendment(s) will not be entered be | ecause: | | |
| (a) they raise new issues that would require further | er consideration and/or search (s | see NOTE below); | |
| (b) they raise the issue of new matter (see Note b | elow); | | |
| (c) they are not deemed to place the application in issues for appeal; and/or | n better form for appeal by mate | rially reducing or sir | nplifying the |
| (d) they present additional claims without canceling | ng a corresponding number of fi | inally rejected claim | s. |
| NOTE: | | | |
| 3. Applicant's reply has overcome the following reject | • • | | |
| 4. Newly proposed or amended claim(s) would canceling the non-allowable claim(s). | be allowable if submitted in a se | eparate, timely filed | amendment |
| 5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for application in condition for allowance because: See | | dered but does NO | T place the |
| 6. The affidavit or exhibit will NOT be considered becaraised by the Examiner in the final rejection. | ause it is not directed SOLELY t | o issues which were | e newly |
| 7. For purposes of Appeal, the proposed amendment explanation of how the new or amended claims we | · · · - · · · · · · · · · · · · · · · · | | and an |
| The status of the claim(s) is (or will be) as follows: | | | |
| Claim(s) allowed: | | | |
| Claim(s) objected to: | | , | |
| Claim(s) rejected: 93-117. | | | |
| Claim(s) withdrawn from consideration: | | | |
| 8. The drawing correction filed on is a) appr | roved or b) disapproved by t | he Examiner | Ω_{Λ} / |
| 9. Note the attached Information Disclosure Statemer 10. Other: | nt(s)(PTO-1449) Paper No(s) | | |
| 10. Other: | ^ | Howard | Weiss |
| | () 1 | rimary Patent Ex | gunine1 |
| | | | |

Continuation of 5. does NOT place the application in condition for allowance because: Applicant's argument that the examiner should withdraw the finality of the office action mailed on August 25, 2004 because a new reference was used has been considered, it is noted that the new reference was incorporated in response to amendments made by the applicant, in this case the finality of the office action is proper and is maintained as noted in the MPEP §706.07(a). Regarding applican't argument that Michael et al. does not show a support pillar or a support pillar in contact with the interconnect line, applicant is directed to Fig. 6, where Michael et al. shows that the dielectric layer is patterned to form support pillars, including support pillars in contact with the interconnect line, and although Michael et al. teaches that the support pillars may be formed indiscriminately, it is seen in Fig. 6 a pillar between a first and a second air gap and the pillar being in contact with the interconnectionl line, thus, based on Michael et al.'s drawings and suggestions, it will have been within the scope of one of ordinary skill in the art to form a pillar like so, as suggested by Michael et al.'s drawing even if it is not a preferred embodiment. With regards to applicant's argument that the pillar of Michael et al. does not have the functionality of providing and increase mechanical strength and thermal conductivity to the interconnection line, it is noted that Michael et al. does teach the pillar for the purpose of providing increased mechanichal strength and support for the overlying layers that are part of the finalized device, and that the thermal conductivity is inherent as the support pillar is in contact with the interconnection line and by that it increases the surface by which heat is radiated from the interconnection line, furthermore the functional language in the claim does not patentably distinguish from that which is taught by Michael et al. as modified by Chen et al. and Grill et al.